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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,274	01/30/2004	Charles Edward Bayha	41212-200409	4832

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EXAMINER

FISCHER, JUSTIN R

ART UNIT PAPER NUMBER

1733

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,274

Applicant(s)

BAYHA ET AL.

Examiner

Justin R. Fischer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-32, 34-45 and 47-50 is/are rejected.
- 7) ☒ Claim(s) 33 and 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 47 recites the limitation "said pumping" in line 47. There is insufficient antecedent basis for this limitation in the claim. It is unclear if applicant intends this claim to depend from claim 46

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 25, 27, 31, 32, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Langlands (US 4,234,533, of record).

Langlands discloses a method of providing an insulated glass structure comprising at least two sheets with at least one of the sheets made of glass (column 5, lines 48-49), a spacer which separates and supports at least two sheets of glass and forms an enclosed space between said two sheets (tape; column 5, lines 49-51),

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accessing the space for providing a liquid resin formulation on a surface of glass defining the space (column 5, lines 55-57), the resin is liquid prior to cure, and curing said resin (column 5, line 58 to column 6, line 12; see also embodiment of column 6, lines 28-31). In this instance, the language "insulated glass unit" is not seen to define over the assembly of Langlands.

As to claims 27 and 31, Langlands discloses the claimed compositions (column 3, lines 35 to 68).

As to claim 32, Langlands teaches that the assembly is maintained in a horizontal position after the resin is poured into the space (Column 4, Lines 44-46 and Column 6, Lines 1-10)

Regarding claim 34, the first and second sheet of Langlands is glass.

With respect to claims 35 and 36, Langlands discloses the use of UVAC 2721 made from polyols, glycols, polyfunctional acids, and dibasic acids (Column 3, Lines 50-55).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 26 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands as applied in claims 25 and 37 respectively and further in view of

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Nishitani (US 5,009,694, newly cited). While Langlands fails to expressly suggest that the glass sheets are tempered or heat strengthened, such a technique is extremely well known and conventional and describes a large number of glass sheets used in, among other things, vehicle and building construction, as shown for example by Nishitani (Column 1, Liens 10-25). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to treat the glass sheets of Langlands in accordance to the claimed invention.

7. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands (US 4,234,533) as applied to claims 25 and 27 above and further in view of Park et al. (US 3,334,008, of record) and/or Bayha et al. (US 5,318,853, of record).

Langlands discloses using any known polymers for the liquid resin including polyester (column 3, lines 34-47). It is considered well known in the art to use polyester resins formed from a variety of known components for the liquid resins between glass sheets in glass structures. For example, both Park and/or Bayha disclose known polyester adhesives for bonding sheets in glass structures. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide known resins in the method as shown by Langlands for bonding the two sheets including polyester resin as is considered well known and conventional in the art, and further exemplified by Park and/or Bayha.

As to claim 28-30, the polyester resin in Park and/or Bayha is formed from the claimed components and reagents of polyols for forming polyester. Such components and reagents are considered conventional for forming polyesters and it would have

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been well within the purview of one of ordinary skill in the art to use such conventional components as reagents.

8. Claims 37-39, 41, 45, 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands. As detailed above, Langlands substantially teaches the method of the claimed invention. In this instance, Langlands generally suggests the manufacture laminated glass assemblies or glass units; however, the reference additionally teaches that the method can be used to form glass doors or windows without removing them from their frames (Column 6, Lines 25-32). This language suggests that it would have been within the purview of one of ordinary skill in the art at the time of the invention to practice the method of Langlands by removing such a glass assembly or unit. It is emphasized that a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. As such, it would have been obvious to carry out the method of Langlands as a "retro-fitting" method.

With respect to claim 38, Langlands teaches that the insulated glass unit/assembly can be moved to a horizontal position in order to allow a viscous resin to flow (Column 6, Lines 50-60)- at this stage, the resin is uncured and thus, the step constitutes "providing said liquid resin formulation".

As to claims 41, 45, 49, and 50, Langlands discloses the claimed compositions (column 3, lines 35 to 68).

Regarding claim 48, the first and second sheet of Langlands is glass.

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9. Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langlands as applied in claim 37 above and further in view of Park et al. and/or Bayha et al..

Langlands discloses using any known polymers for the liquid resin including polyester (column 3, lines 34-47). It is considered well known in the art to use polyester resins formed from a variety of known components for the liquid resins between glass sheets in glass structures. For example, both Park and/or Bayha disclose known polyester adhesives for bonding sheets in glass structures. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide known resins in the method as shown by Langlands for bonding the two sheets including polyester resin as is considered well known and conventional in the art, and further exemplified by Park and/or Bayha.

As to claim 42-44, the polyester resin in Park and/or Bayha is formed from the claimed components and reagents of polyols for forming polyester. Such components and reagents are considered conventional for forming polyesters and it would have been well within the purview of one of ordinary skill in the art to use such conventional components as reagents.

Allowable Subject Matter

10. Claims 33 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

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11. Applicant's arguments filed April 6, 2006 have been fully considered but they are not persuasive.

Applicant initially argues that Langlands does not describe an "insulated glass unit" but rather is directed to a method of bonding spaced sheets. It is unclear how the glass unit/assembly of Langlands, which comprises a pair of spaced apart glass sheets, cannot be viewed as an insulated glass unit. It is emphasized that the claims fail to define the insulated glass unit in a manner that defines over the structure of Langlands.

Applicant's arguments concerning Bayer are moot since the reference is not used in the rejection of pending claims 25-50.

In regards to Bayha, the reference is provided to evidence the known polyester compositions defined by the claimed invention. It is noted that Langlands expressly teaches the use of a low shrinking polyester and one of ordinary skill in the art at the time of the invention would have found it obvious to use of the well known and conventional polyesters used in the glass industry.

Applicant's comments regarding Wismer and Delmonte are moot since the references are not used in the rejection of pending claims 25-50.

In regards to Park, applicant simply states that Park is directed to a glass laminate and that the improvement of Park is a specific silane additive. It is unclear how this affects the use of Park as a teaching of the well-known and conventional polyesters used in the glass industry.

Applicant's comments regarding Triebel are moot since the reference is not used in the rejection of pending claims 25-50.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Justin Fischer", is positioned above the printed name.

Justin R Fischer
Primary Examiner
Art Unit 1733

JRF

July 1, 2006